

ABSTRACT OF THE DISCLOSURE

To deposit optical quality films by PECVD (Plasma Enhanced Chemical Vapour Deposition), a six-dimensional space wherein five dimensions thereof correspond to five respective independent variables of which a set of four independent
5 variables relate to the flow-rate of respective gases, a fifth independent variable relates to total pressure, and a six dimension relates to observed FTIR characteristics is first created. Then an optical film is deposited while maintaining three of the set of four independent variables substantially constant as well as the fifth independent variable, and varying a fourth of the set of four independent
10 variables to obtain desired characteristics in the sixth dimension.